

GARzefe



The Official Newsletter of the Gwinnett Amateur Radio Society

August 2022 http://www.gars.org/ Volume 32, Issue 8

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Fairgrounds

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GARS Meeting: How to build 4-element 2m Cubical Quad Antenna by Dallas N4DDM Tuesday August 9, 2022 at 7:00 PM



President's Message

From the President...



Helping future Hams – Our HamCram team had another full class for the recent session. Several weeks ago, the GARS team conducted the 'General' class license HamCram. The session had a great turn out with many new ham upgrades earned. Many thanks to the instructors of this class:

- Ralph KJ4CNC
- John WB4QDX
- Jamie KX4HA

And many thanks to all the Volunteer Examiners that showed up to process the students. Read more about this effort in this newsletter edition.

Be sure to keep GARS on your schedule! You will want to attend our meeting this month as Dallas – N4DDM, will give a presentation on how to build your own Cubical Quad Antenna. I've built these, and variations of, in the past. The gain from this style antenna is fantastic. See you there.

In October, we have our annual "Show and Tell" program. As usual, we will meet and see what creations folks have developed for their ham radio enjoyment and use. Start preparing or finishing up on that special project, and bring it to the meeting so we all can see and appreciate it. Who knows, it may spawn an idea from others to duplicate one for themselves. Or create a new and improved version?



Hmmm, should I bring my 'Cooler, Cooler' or a homebrew multi-function transmitter dummy load?? Show up to see which one I bring.

TechFest! TechFest was postponed for a couple of years due to issues beyond our control. Now, TechFest is returning and in a big way! Just five months away, it truly promises to be one for the books. We have a new building in a great location you all should know. It will be held at the Gwinnett County Fairgrounds in Lawrenceville, GA, January 14, 2023.

And this year's TechFest will hit a milestone – Twenty-Five Years. The very first GARS Techfest was held in 1998, therefore making the 2023 event our 25th anniversary of the GARS TechFest.

If anyone has any photos of that particular event from 1998, please share them with us so that we may use them in some special way. You can email them to me (ad4pz@arrl.net). Better yet, if you are a member of our groups.io, drop them in a photo album for '1998 – TechFest' https://groups.io/g/GARS/album?id=277402

If you would like to be part of the TechFest team, <u>Click Here</u> to go to the signup sheet and be apart of our team. I guarantee it will be a rewarding effort.



73

Joe Biddle, AD4PZ

Club President



GARS Repeaters and Other Communications

2 Meter Repeaters

147.075(+) MHz Tone 82.5 147.255(+) MHz Tone 107.2

1.25 Meter Repeater

224.580(-) MHz Tone 100.0, 1.6 MHz Offset

70 Cm Repeaters

444.525(+) MHz Tone 82.5 442.100(+) MHz Tone 100 442.325(+) MHz Tone 100

6 Meter Repeater

53.110 (-1 MHz) No Tone (Offline for Maintenance)

Other Resources:

APRS

144.390 -- 1200 Baud W4GR

D-STAR

WD4STR 145.060 + (1.4 MHz) 440.550 + (5 MHz) 6M Currently down

147.075 Operational in Snellville 147.255 Operational in Snellville

224.580 Operational in Grayson

442.100 Operational at Goshen

Springs

442.325 Operational in Buford 444.525 Operational in Snellville

Link remote receivers being added

Notable Web Links

Ham Radio Glossary: https://noji.com/hamradio/glossary.php a very comprehensive listing provided by Noji Ratzlaff KNØJI. On his site there is also a lot of information about getting started in ham radio.

Need Help – Let GARS Elmers answer your questions

Send an email to elmers@gars.org with the subject listing the area (like Antennas, Repeaters, Digital, DMR etc.) of your query to get to GARS Elmer volunteers.

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

Original articles, art, and photos are invited and encouraged. Previously copyrighted submissions cannot be accepted for reprinting unless permission from the appropriate publisher is provided in writing along with the information being submitted. If reprints are from publications allowing their unrestricted use, please include a copy of the printed permission contained in the publication.

If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to editor@gars.org. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Karen KI4HPP and Kyle W4KDA who print copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the newsletter electronically.

<u>Deadline for submissions</u> is the <u>28th of each month</u> for inclusion in the <u>following month's issue</u>.

For additional information view our Website at: http://www.gars.org

Newsletter Email: editor@gars.org Editor: Bob Hoffmann, K4CQO Assistant Editor: Bill Eggers, WB2RIS

GARS HELP WANTED

Speakers Needed for GARS Workshop Presentations, 3rd Tuesday of the month – Email workshop@gars.org to volunteer. [PS— Articles to publish in the GARzette, either written by GARS members or published elsewhere, are always welcome. —Ed.]



GARS Meetings & Workshops

GARS Meetings and Workshops are held in-person at the EAA 690 Hangar, 690 Airport Rd, Lawrenceville, GA 30046.

Meetings and Workshops are OPEN to all, feel free to share your invite with others.

Zoom login info will be posted to http://www.gars.org prior to the meeting.

When events are available on Zoom

- Workshops and Meetings will be recorded. By participating you consent to being recorded.
- Please change your display name to Your FirstName Call Sign, e.g. Hiram W1AW
- How to change Your Display Name in Zoom
- Please stay muted until ready to speak. Your space bar works like a PTT for un-muting
- To be fair to everyone, there will be a three minute limit for each person during Q & A
- You may ask questions in chat; please stay on topic while using chat.

GARS Meetings Schedule (second Tuesday @ 7:00 PM): (these are the presentations)

- August 9, 2022 How to build a 4-element, 2m, Cubical Quad Antenna Dallas N4DDM
- September 13, 2022 Favorite Ham Radio and Related Websites
- October 11, 2022 GARS Show-n-Tell The Hand-on Workshop
- November 8, 2022 Pi-Star DMR Hot Spot Mark Prichard KN2TOD
- December GARS Holiday Party

Workshop Schedule (third Tuesday @ 7:00 PM): (these are the Hand-on Workshops)

- August 16, 2022 How to build a 4-element, 2m, Cubical Quad Antenna Dallas N4DDM
- September 20, 2022 Favorite Ham Radio and Related Websites
- October 18, 2022 GARS Show-n-Tell The Hand-on Workshop
- November 15, 2022 Pi-Star DMR Hot Spot Mark Prichard KN2TOD
- December GARS Holiday Party

GARS Meeting – August 9, 2022

How to build a 4-element, 2m, Cubical Quad Antenna - Dallas N4DDM

Dallas will go over his selection of plans found on the Internet and Bill of Materials. The plan/goal is to make this from items found in most garages or the big box hardware stores.

GARS Workshop – August 16, 2022

How to build a 4-element, 2m, Cubical Quad Antenna - Dallas N4DDM

Dallas will go over in detail his building techniques to build the 4-element, 2m, Cubical Quad Antenna..

This will be an in-person Workshop at the EAA 690 Hangar.



GARS Happenings

20 Years ago in the August 2002 GARzette:

- There was a mid-year special election announced
- The yearly Dog Show event was going to be held in August with GARS help
- The GARZette published a list of local nets
- Gwinnett ARES Earns 501 C(3) Status

You can always browse the GARzette archive at http://www.gars.org/newsletters and go directly to the 2002 GARZette by clicking on the image. 73, Bob, K4CQO, GARzette Editor



Health and Wellbeing - Sandy Jackson, KJ4DRO

Look for this resource on <u>gars.org</u> and use it as a means to convey information about a GARS family member or Silent Key notification.

Net Managers Corner

Monday Night 2 Meter "Want, Swap, Sell, and Information Net"

GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club with the membership and awards to prove it. Our club is very busy and active, and we use the Monday night net to get timely information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people who make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only seven operators who serve as the NCS for the GARS net every Monday night. In no particular order, they are:

Don – KW4AL Ray – N4GYN Bill – WG9NUW David – KA4KKF Glen – W3WWT Russell – AB4QQ Chuck – KK4TKJ Charlie – WS4TOT

As GARS Net Manager (Chuck KK4TKJ), I would like to have more volunteers to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club. The "Want, Swap, Sell Information Net" begins promptly at 19:30 every Monday night and runs about 30 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact me (Chuck) at KK4TKJ@arrl.net. Sign up to help support the effort that makes GARS the great club that it is. 73 and see you on the Nets!



GARS General Ham Cram

GARS had a weekend Ham Cram for the General license on July 30th and 31st.

We had a great exam session at our General License HamCram Class. 12 out of 17 applicants passed! Congratulations to John, WB4QDX, Ralph, KJ4CNC and Jamie, KX4HA for another job **WELL DONE!!!**

Exam session results:

- 1 new General (passed both Technician and General)
- 11 upgraded to General

Special thanks to the Volunteer Examiners who made this exam session possible:

John, WB4QDX Richard, KM4SWL Bill, WR1TR Frank, KV4SP Chuck, KK4TKJ (Co-CVE) Bob, K4CQO Bill, WB4WTN Mike, ND4V Jamie, KX4HA Dave, W4DTR (CVE)

Thanks & 73,

Dave Bruse, W4DTR (CVE)
GARS VE Team Leader
Email: exams@gars.org

Email: exams@gars.org









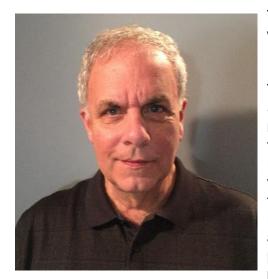




Hallicrafters Big Iron

Vintage Amateur Radio

de Bill Shadid, W9MXQ



This month we will be back in the 1960's with the desktop, heavy weight, offerings from Hallicrafters. I call this one, "Hallicrafters Big Iron!!" Hallicrafters held a place of honor with their SX-101 Receiver, HT-32 Transmitter, and HT-33 Linear Amplifier station. These radios were some of the first of the many new technology SSB/AM/CW radio stations of the time. They did not really fit the marketplace created by the Collins S-Line but there was still at that time a good base of customers looking for full sized separate receiver, transmitter, and linear amplifier stations. Hallicrafters did well in that market. But, at the same time, there existed a market for a lower cost station with a similar footprint. The answer from Hallicrafters was the popular SX-111 Receiver, HT-37 Transmitter, and HT-41 Linear Amplifier. Depending on how we define "full power" this combination provided 1,000 watts input on the then popular 80, 40, 20, 15, and 10-meter bands.



SX-111 Receiver



HT-37 Transmitter

HT-41 Linear Amplifier

The radios above were lower cost versions of the set radios shown here – and mentioned above:



SX-101 Receiver



HT-32 Transmitter



HT-33 Linear Amplifier

These radios have a long history with me. In fact, the SX-111 Receiver and HT-37 Transmitter were in my station in the 1970's and they have been through several owners since then, always known to me, as they are to this day. I followed them after they departed WA9MXQ (my call in the 1970's) and they finally went to Ed Fischer, KC9LRJ, now a Silent Key. After Ed Fischer, they went to Bill Schnell, AC9JV, where they remain.

Their most recent long operating period was in an operating event setup by Ed Fischer in early 2014. In a one-week period, Ed and I worked close to 200 stations in what was to be his last major ham radio adventure. All but about 15 QSO's that we made from Ed's shack were on SSB – with the balance being CW. We ran the station with the HT-37 Transmitter driving the HT-41 Linear Amplifier to about 600 watts PEP output on SSB and CW. We also used a Barker & Williamson Speech Processor. Later that year the SX-111 and HT-37 were sold to AC9JV and the HT-41 to a ham whose name is lost to



history.

The design of the two radio lines from Hallicrafters were more alike than different in the SX-111 vs the SX-101 and in the HT-37 vs the HT-32. Here are a few details:

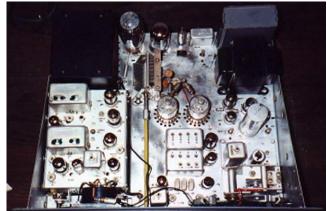
Parameter	HT-37	37 HT-32	
Final Amplifier Tubes	6146 (2)	6146 (2)	
SSB/CW Input Power	144 Watts	144 Watts	
SSB Generation	Phasing	Crystal Filter	
Cabinetry	Wrap Around, Perforated, with no access without disassembly.	Rack Style Enclosure with a Top Access Door.	

The difference in SSB Generation was a separate sub-chassis that was inserted into the HT-37 or HT-32 Main Chassis – otherwise the Main Chassis was the same on both units. The HT-37 was open inside with the final amplifier tubes in the middle of the chassis. The HT-32 layout was identical but with a shield cage around the finals and a small fan to cool the enclosed tubes. Perhaps Hallicrafters felt that if you did not want to spend the extra money for the HT-32 then you did not deserve the extra interference filtering.

There may be more of these radios in our midst. I know, for instance of at least one other SX-101 and HT-37 pair among the members of the Wisconsin Amateur Radio Club. Both of those pairs used to reside at W9MXQ. There is an SX-101 and HT-32 pair in Ozaukee Radio Club in the shack of Tom Ruhlmann, W9IPR.

To get an idea of the modular construction shared on the Main Chassis between the HT-37 and HT-32 Transmitters, please see these pictures:





HT-37 Transmitter (Front at Bottom)

HT-32 Transmitter (Front at Bottom)

See similarities in Main Chassis – but the Phasing SSB Sub Chassis to the left on the HT-37 and the Filter SSB Sub Chassis in the same place in the HT-32.

(Photograph angles make it difficult to see just how similar these radios were.)







SX-111 Receiver (Front at Top)

SX-101 Receiver (Front at Top)

"Matching" was not in the design concept of the SX-111 Receiver to its partner Transmitter, the HT-37. The cases were painted similarly but the designs were different.

The SX-111 was a good deal smaller and lighter than the SX-101 from where it took its design concepts. Chassis layout was slightly different but if you look carefully you can see many similarities. The simple readout dial illumination on the SX-111 was much more complex on the SX-101 with its feature of only illuminating the band in use. Circuitry was very similar but the extra heavy chassis on the SX-101 made it more stable in a day when bulk meant less stress on the mechanical frequency determining elements (variable capacitors, primarily) and therefor better stability.



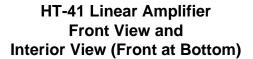
See the Illuminated 20-Meter Band on this SX-101. The entire dial on the SX-111 is always illuminated. 1960's high tech!!

Let's discuss the rarer part of he SX-111/HT-37 and SX-101/HT-32 Stations – their matching Linear Amplifiers. Those would be the HT-41 (which has been a part of my station) and HT-33, respectfully. Check these pictures of these fine amplifiers with the HT-41 being in a cabinet to match the HT-37 and the HT-33 being in a cabinet to match the HT-32:













HT-33 Linear Amplifier
Front View and
Interior View (Front at Bottom)

You can see the more complex construction in the HT-33 amplifier with its forced air-cooling system vs the small fan – extreme rear – blowing air at the two final tubes.

The HT-41 used a rather novel tube in the 7094 Pentode – two of them working together in parallel. "Novel" is my word for this final extension of the design of the 6146 tube we see commonly in radios of the time. The 7094 had a dissipation of 125 watts¹. This was tight for use in a Class B Linear Amplifier at the 1,200 watts input of the HT-41. Two tubes could dissipate 250 watts (2 x 125) while at 50% Class B efficiency the 1,200-watt HT-41 would want to handle 600 watts of waste heat. However, with SSB and CW duty cycle of well under 100% the heat was handled in fine fashion. The HT-41 required only 40 watts to be driven to full power input of 1,200 watts SSB and 1,000 watts CW (600 watts and 500 watts, respectfully).

The HT-33 was a different story in that the PL-172 Final Amplifier Tube was a 1,000-watt dissipation Pentode that could loaf along at 1,000 watts input on CW or as much as 2,000 watts PEP input on SSB. That netted 500 watts output on CW and probably over 1,000 watts PEP output on SSB. The pictures above show the much more powerful components in the HT-33. These were earlier days and high voltage solid state rectifiers were expensive. The HT-41 used two 866AX Mercury Vapor Rectifier tubes while the HT-33 used the more powerful 866A Mercury Vapor Rectifier tubes in a similar circuit. The HT-33 later switched to 3B28 High Vacuum Rectifier Tubes. The HT-33 also added four regulator tubes in the internal power supply making a tube compliment of eight tubes.



Page 6 the 1964 Hallicrafters
Catalog showcasing the HT37 and the SX-111 along with
Hallicrafters own version of
he Astatic 10-D/TUG-8
Microphone and PTT Base.
Also, the Hallicrafters R-48
Speaker Console sitting atop
the SX-111. Just at the far left
is a Vibroplex VibroKeyer that
must somehow be feeding an
off screen Hallicrafters HA-1
'TO Electronic Keyer.



As time went on and more sophisticated radios came from other manufacturers, the SX-111 (most certainly) and even the mighty SX-101 lost their luster. The SX-111 gradually faded away – knowing in its heart it was simply an SX-101 "want to be." But, even the SX-101, which had morphed by then to the SX-101A, was getting long in the tooth. The market was being eaten up by the Hammarlund HQ-170A, the National NC-303, the Collins 75A-4 and 75S-3, and even the Drake 1-A, 2-A, and 2-B. Hallicrafters responded in what was to be their finest receiver. The SX-115.





The SX-115, shown on the left, pictured next to the last of the SX-101 series, the SX-101A. By that time, the SX-115 was the main piece in the final "big iron" picture from Hallicrafters. Time moved on and the SX-111, HT-37, and the HT-41 were gone. The new breed was already on-line in the form of the SX-117 Receiver, HT-44 Transmitter, and the matching HT-45 Linear Amplifier. In their last form, here is the big iron Hallicrafters station, and my longtime favorite:



Left to Right
Hallicrafters HT-32B Transmitter, SX-115 Receiver, and HT-33B Linear Amplifier



Notice the somewhat smaller size (in width) of the SX-115. The SX-101 was the same size as the HT-32 and HT-33 series radios. The SX-115 was not. The SX-115 had a transmitter type VFO and had it been wired that way it is possible that the SX-115 and HT-32B could have been made to transceive. Technically, the SX-115 was ahead of the game – within Hallicrafters. Compared to the likes of the Collins 75A-4, the Collins 75S-3, and perhaps even the Drake 2-B, it was not quite the superior receiver that Hallicrafters had needed. This deficiency was moved forward in the next Hallicrafters series which used the similar design and feature set, SX-117, as its receiver

But, feature set aside, those of you that know this author have often heard him say that from this series of products come his favorite Vintage Ham Station. My idea of a perfect station is centered on an SX-115 receiver, just as you see, above. After all these articles on great radios – my favorite is on this page. To me, it just says, "Vintage Ham Radio.

A special thanks go to Bob, W9DYQ, for his proof reading of my articles. Remember that I am open to questions and comments at my email address, <u>W9MXQ@TWC.com</u>.

Notes:

- 1. By comparison to the 125-watt dissipation of the 7094, other tubes of the day in amplifier use that were similar in capability were:
 - a. the 4X125 with 125-watts of dissipation.
 - b. The 813 with 125-watts of dissipation.
 - c. The T-160L/572B with 160-watts of dissipation

W9MXQ

The entire article is available on-line, see http://www.gars.org/newsletters/2022 08 GARZETTE.pdf



GARS Membership

New Members List in July

Matt Collins (N4KRI)
Kevin Igarashi-ball (KQ4CBT)
Bruce Rhodes (KQ4CBQ)
Sheila Rhodes
Chris Ritchey (KQ4CCF)
Nancy Ritchey
Tyler Wall (KO4UUT)

New Members: 7

Total Members as of August 1, 2022 359

Join GARS members for our weekly breakfast gathering at 7:30 AM most Saturdays Now at Cracker Barrel Restaurant 75 Celebration Dr. Suwanee, GA 30024

Birthdays in August

Dave Adanich (K8WDJ) **Emory Albritton** Kyle Albritton (W4KDA) Jim Barrett (KD4PDY) Stephen Dearman (KI4IXR) Philip Graham (N4PRG) George Guerin (KM4BOS) Jared Hawkins (KM4SSI) Conor Huneycutt (KN4VNU) Gary Jones (W4HX) Cheryl Kempster Ron Langston (WE50) Samuel McClure (KM4AAO) Lige Sims (AB4OK) Robert Sloan (WA4DD) Sahan Thanthiriwatte (KQ4BKE) Earl Whatley (AF4FG) Larry Whited (AB4NX)

GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message. To become a GARS member, or to renew your GARS membership, please visit our website – http://www.gars.org. To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please e-mail your changes to the Membership Committee - membership@gars.org.

Membership Chair: Karen Albritton, KI4HPP **Committee Members**: Dave Bruse, W4DTR

ARRL MEMBERSHIP

To update your ARRL membership information, please visit their website - http://www.arrl.org.

MAINTAIN YOUR LICENSE

You can update your Amateur Radio license information with the FCC at their website for free - https://www.fcc.gov/wireless/universal-licensing-system. License renewal is subject to the \$35 FCC fee.



Donating to GARS

Your GARS donation can be used for a certain purpose by donating to one of these funds:

- GARS SK Memorial Fund for Education (to remember and honor Silent Keys);
- GARS Scholarship Fund (Administered by the ARRL for awarding scholarships);
- GARS General Fund (any club purpose).

GARS has joined these rewards programs (a portion of every purchase you make through these merchants may be donated to GARS):

- Amazon Smiles:
- Kroger Community Rewards program.

For more information on how to sign up for these rewards programs, or to donate to GARS, visit

http://gars.org/gars/donations-to-the-club

GARS on Social Media



Discord Request: http://gars.org/discord



Groups.io: http://gars.org/groups.io



Visit GARS on Facebook:



http://gars.org/facebook



Follow GARS on Twitter: http://gars.org/twitter

Join GARS on YouTube: http://gars.org/youtube

GARS Mail Address:

GARS P.O. Box 492531 Lawrenceville, GA 30049

Officers



Joe Biddle, President AD4PZ



Jamie Burns, Vice President KX4HA



Bill Hawkins, Secretary WR1TR



Pam Meridy, Treasurer WB1AKQ



Kevin Scott, Program Manager

Managers and Committee Chairs



Karen Albritton, Membership Chair KI4HPP



Dave Bruse, VE Team Leader W4DTR



David Adcock, Webmaster, Field Day Chair, TechFest Chair KA4KKF



Ralph Pickwick, Apparel Manager and Education Chair KJ4CNC



Bob Hoffmann, GARzette Editor K4CQO



Eddie Foust, Repeater Chair WD4JEM



Mike Weathers, WAS / DXCC QSL Card Checker and Historian



Chuck McCord, Net Manager KK4TKJ



Steve Back, Technical / RFI Advisor WB2OGY



Kyle Albritton, Multimedia Chair W4KDA



Don Stewart, Elmer Manager KW4AL



Sandy Jackson, Health and Wellbeing KJ4DRO



Open Winter Field Day Chair Georgia QSO Chair

Open Open Workshop Leader

Directors and Trustees



John Davis, WB4QDX



Rick Cobb, N4XYY



Kyle Albritton, W4KDA



Bill Cherepy, WB4WTN W4GR Trustee



GARS Meeting Minutes

Gwinnett Amateur Radio Society – MEETING MINUTES 7/12/2022

In person and online meeting. 42 attendees in person.

Vice President Jamie Burns (KX4HA) Opened the meeting at 7:00pm and closed the meeting at approximately 8:30pm

New hams and visitors: Joe (AD4PZ)

• First time visitors recognized

• New hams and upgrades recognized

Membership: Karen (KI4HPP)

Karen reported 361 members

Education: Ralph (KJ4CNC)

 The GARS ARRL scholarship went to Alexandra Kemp (WD4BDQ)

 Ruth (KM4LAO) got another big scholarship and is pursuing a Masters at Penn State.

 Some of the McConnel kids showed up at Field Day.

 The McConnel Middle school open house will be August 1 and a new crop of potential hams will join.

The General Ham Cram will be at the end of July.

VE Team: Dave (W4DTR)

7 of the 8 passed in the regular monthly exam session

ARES: Jamie (KX4HA)

 We are back in the EOC and regular radio room checks have resumed.

Hospital stations are being checked and brought online.

Programs: Kevin (K4GTR)

 August - How to build a 4-element, 2m, Cubical Quad Antenna – Dallas N4DDM

September - Favorite ham related websites part deux

October – show and tell

 November – Pi-Star DMR Hot Spot – Mark Prichard KN2TOD

December – GARS Holiday Party

Workshop: Dallas (N4DDN)

Workshops are a mirror of the monthly program.

Field Day: (KA4KKF)

Numbers are in the GARzette

• Set your calendar for next year.

Other:

 Joe recognized Bill Cherepy for his long time service as trustee.

Program: Mark N7GRB presented on Winlink.

Minutes prepared by club secretary Bill Hawkins (WR1TR).

Workshop Minutes - July 19, 2022

Number in Attendance: 12 plus 2 harmonics

Workshop Topic: The Prequile to How to build a 4-

element, 2m, Cubical Quad Antenna

Presenter: Dallas N4DDM

Brief Summary: Dallas touched on the set of plans for the 2m cubical quad calculator he found on the Interet, his selection of the fiberglass spreaders for the elements, and some of the techniques he will use to build the antenna. Joe AD4PZ brought in a UHF Quagi he built years ago.

The rest of the Workshop was spent polling those present of topics they would like to see at upcoming Meetings and Workshops.



Events – GARS and others

F	ARRL (CONTESTING INFO	HAMFEST CALENDAR
From ARRL Contest Calendar > For more information click the links <			[Please confirm the status of a Hamfest before making plans to attend]
2022	2023	January	08/13/2022 - Fort Pierce Hamfest Location: Fort Pierce, FL
1	1	Straight Key Night	Type: Sponsor: Fort Pierce Amateur Radio Club
1 8-9	7 7-8	Kid's Day RTTY Roundup	Website: https://FPARC.ORG
15-17	21-23	January VHF Contest	08/20/2022 - 08/21/2022 Huntsville Hamfest, ARRL SE Division Convention Location: Huntsville, AL
14-18	13-17	February School Club Roundup	Type: ARRL Convention
19-20	18-19	International DX – CW	Sponsor: Huntsville Hamfest, Inc. Website: http://hamfest.org
5-6	4-5	March DX Contest SSB	08/20/2022 - TARCFest
3-0	1 -0	April	Location: Tampa, FL Type:
10	16	Rookie Roundup - Phone	Sponsor: Tampa Amateur Radio Club Website: http://www.hamclub.org
		May No planned contests	09/10/2022 - Gadsden Amateur Radio Hamfest
		June	Location: Attalla, AL Type: ARRL Hamfest
4-5	3-4	International Digital Contest	Sponsor: Gadsden Amateur Radio Club
11-13 18	10-12 17	June VHF Kid's Day	09/10/2022 - Prater's Mill Swapfest
15-26	24-25	Field Day	Location: Dalton, GA Type: ARRL Hamfest
9-10	8-9	July IARU HF World	Sponsor: Dalton Amateur Radio Club Website: https://www.facebook.com/groups/499173303579789/
		Championship	10/07/2022 - 10/08/2022 Melbourne Hamfest, ARRL Florida State Convention
6-7	5-6	August 222 MHz and Up Distance	Location: Melbourne, FL Type: ARRL Convention
21-22	19-20	Contest	Sponsor: Platinum Coast Amateur Radio Society(PCARS) Website: http://pcars.org
21	20	10 GHz & Up - Round 1 Rookie Roundup - RTTY	10/15/2022 - 2nd Annual Manatee Amateur Radio Club Swapfest
		September	Location: Bradenton, FL
10-12 17-18	9-11 16-17	September VHF EME - 2.3 GHz & Up - Round	Type: ARRL Hamfest Sponsor: Manatee Amateur Radio Club, Inc.
17-18	TBA	2 10 GHz & Up – Wknd 1	Website: https://www.manatee-arc.org/
		October	10/15/2022 - Annual North Okaloosa Amateur Radio Club Hamfest Location: Crestview , FL
15-16	TBA	EME - 50 to 1296 MHz -	Type: ARRL Hamfest Sponsor: NOARC returns for yet another great show!
17-21	16-20	Wknd 2 School Club Roundup	Website: https://w4aaz.org/noarc-hamfest/
		November	10/15/2022 - Flamingo Net Flea at U. of Miami Location: Coral Gables, FL
5-7 12-13	4-6 TBA	Nov. Sweepstakes - CW EME - 50 to 1296 MHz	Type: ARRL Hamfest
19-21	18-20	Nov. Sweepstakes - Phone December	Sponsor: Flamingo Net ARC Website: http://www.FlamingoNet.8m.net
2-4	1-3	160 Meter	10/22/2022 - Deep South Amateur Radio Club Hamfest
10-11	9-10 17	10 Meter Rookie Roundup-CW	Location: Chickasaw, AL Type: non-ARRL Hamfest
18 For mo	ore inforn		Sponsor: ARRL
		org/contest-calendar	For more information: http://www.arrl.org/hamfests-and-conventions-calendar
			When searching by division, remember some states adjacent to GA are in
			different divisions: Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC



GARS Events Calendar for 2022		GARS Recurring Calendar		
Winter Field Day Spring Technician HamCram Dog Show Fundraiser Georgia QSO Party North metro area Fox Hunt Memorial Day Parade ARC/KARC Hamfest Field Day Summer General HamCram JOTA Fall Technician HamCram Maker Faire Stone Mt. Hamfest Holiday Party	Cancelled for 2022 Jan 29-30 2022 March 26-27, 2022 March 30-April 3 2022 April 9-10 2022 April 2022 May 30 2022 June 4 2022 June 26-27 2022 July 30-31 2022 October 16-17 2022 October 29-30 2022 TBD November 5-6 2022 December 3 2022	 2nd Tuesday of the month at 7 pm (except December) Monthly Club Meeting 690 Airport Rd, Lawrenceville, GA 30046 3rd Tuesday of the month at 7 pm (except December) Monthly Workshop 690 Airport Rd, Lawrenceville, GA 30046 2nd Sunday of the Month at 2 pm GARS Ham Exam Session 690 Airport Rd Lawrenceville, GA 30046 Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater Most Saturdays at 7:30 am: GARS Weekly Breakfast Cracker Barrel Restaurant 75 Celebration Dr., Suwanee, GA 30024 		

GARS CALENDAR FOR August 2022

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5	6
	7:30 - 8:00 PM GARS 2M Net	7:00 PM GARS Exec Meeting (Online)				Breakfast at Cracker Barrel in Suwanee 7:30 AM
7	8	9	10	11	12	13
	7:30 - 8:00 PM GARS 2M Net	7:00 PM GARS Meeting EAA 690 Hangar				Breakfast at Cracker Barrel in Suwanee 7:30 AM
14	15	16	17	18	19	20
GARS VE Exam Session EAA 690 Hangar 2:00 PM	7:30 – 8:00 PM GARS 2M Net	7:00 PM GARS Workshop EAA 690 Hangar				Breakfast at Cracker Barrel in Suwanee 7:30 AM
21	22	23	24	25	26	27
	7:30 - 8:00 PM GARS 2M Net					Breakfast at Cracker Barrel in Suwanee 7:30 AM
28	29	30	31			
	7:30 - 8:00 PM GARS 2M Net					



Local Ham Radio Exams & Meetings

GARS Ham Radio Exams

Second Sunday of the month

Doors open at 1:45pm, exams start promptly by 2:00pm

GARS VE-Team VEC: W5YI-VEC EAA 690 Hangar 690 Airport Rd

Lawrenceville, GA 30046

GARS VE Team Leaders E-mail: exams@gars.org

July 2022 Results

We had a very good session on Sunday, July 10, 2022. Seven applicants tested and the exam session results were:

Four new Technicians.

One new General (passed Tech and General),

Two upgrades to Amateur Extra.

Special thanks to our Volunteer Examiners who made today's exam session possible:

- W4DTR Dave Bruse (CVE)
- KV4SP Frank Haynes
- K4CQO Bob Hoffmann
- WB4WTN Bill Cherepy
- K4FUM Jere Sandidge

73,

Chuck McCord, KK4TKJ (Co-CVE)

GARS VE Website: http://gars.org/exams has location information and testing requirements.

Local Ham Radio Exams

In order to find an exam session near you, please visit http://www.arrl.org/exam_sessions/. Contact the information in the listing for further information.

Local Ham Radio Meetings

In order to find a local Ham Radio Club meeting near you, please visit http://www.arrl.org/find-a-club. Contact the club for meeting information.

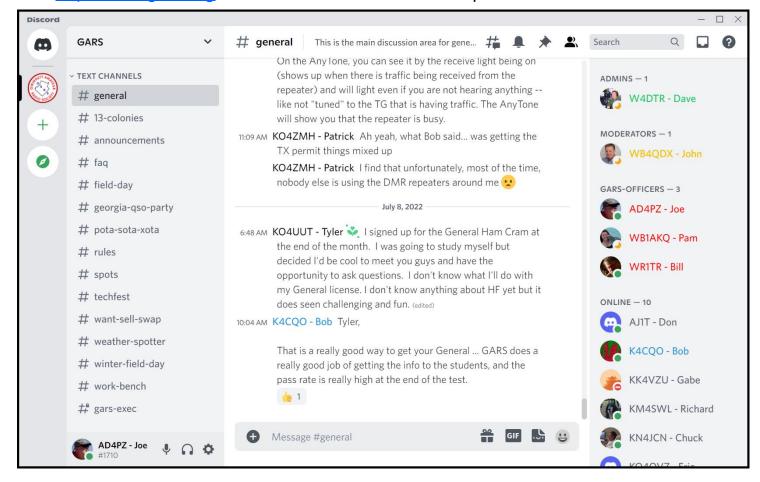




From the Prez:

Don't forget about our Discord utility for GARS announcements, news, activity spotting and more.

See http://www.gars.org left side menu. Below is a sample of Discord.





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★ ★ ★ TECHFEST 2023 ★ ★ ★

SATURDAY, JANUARY 14, 2023

EXHIBITORS: SET UP 7:30AM - 9:00AM

PUBLIC: 9:00AM - 3:00 PM

HAM EXAMS: 9:00AM - 11:00AM

FINAL PRIZE DRAWING: 3:00 PM

-FORUMS-

-EXHIBITORS-

·RAFFLE PRIZES-

-DOOR PRIZES-

-FREE STUFF-

-CHILI CONTEST-



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